The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

## UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte R. DENNIS NESBITT

Appeal 2006-1941 Application 09/877,835 Technology Center 3700

Decided: March 22, 2007

Before TERRY J. OWENS, MURRIEL E. CRAWFORD, and STUART S. LEVY, *Administrative Patent Judges*.

OWENS, Administrative Patent Judge.

#### **DECISION ON APPEAL**

The appellant appeals from a rejection of claims 1-9, 11-17, 19 and 20, which are all of the pending claims.

#### THE INVENTION

The appellant claims a golf ball. Claim 1 is illustrative:

## 1. A golf ball comprising:

a multi-layer core comprising a center component and a core layer disposed about said center component, wherein said center component of said multi-layer core is softer relative to said core layer;

wherein said center component comprises a thermoset material and said core layer comprises a thermoset material; and,

a cover layer disposed about said multi-layer core; wherein said cover layer includes one of (i) a multi-layer cover comprising an inner cover layer having a Shore D hardness of 65 or greater and an outer cover layer having a Shore D hardness of 65 or less, said inner cover layer being harder than said outer cover layer, (ii) a multi-layer cover comprising an inner cover layer having a Shore D hardness of 65 or less and an outer cover layer of 65 or greater, wherein said inner cover layer is softer than said outer cover layer, (iii) a single non-ionomeric outer cover layer having a Shore D hardness of from about 40 to 80, and (iv) a single ionomeric outer cover layer having a Shore D hardness of at least 56.

#### THE REFERENCES

Yamagishi	5,688,595	Nov. 18, 1997
Melvin	5,779,562	Jul. 14, 1998

Science and Golf III, Proceedings of the 1998 World Scientific Congress of Golf 441-42 (M.R. Farrally and A.J. Cochran, eds., Human Kinetics, undated) (Farrally).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> There is no dispute as to whether Farrally is prior art.

#### THE REJECTIONS

The claims stand rejected under 35 U.S.C. § 103 as follows: claims 1-3, 5-9, 11-16, 19 and 20 over Melvin in view of Yamagishi, and claims 4 and 17 over Melvin in view of Yamagishi and Farrally.

## **OPINION**

We affirm the aforementioned rejections.

Rejection of claims 1-3, 5-9, 11-16, 19 and 20

The appellants do not separately argue the dependent claims (brief, page 10). We therefore limit our discussion to the independent claims, i.e., claims 1, 14 and 20. See 37 CFR § 41.37(c)(1)(vii)(2004).

Melvin discloses a golf ball having an inner cover with a Shore D hardness  $\geq 60$  and an outer cover with a Shore D hardness that is  $\leq 55$  and is less than the Shore D hardness of an inner core (figure). By "inner core" Melvin apparently is referring to the center core in the figure. Thus, the highest the center core Shore D hardness needs to be is 56. Around the center core is an outer core having a Shore C hardness 30-90 (Shore D hardness 29-97) (figure).

Yamagishi discloses a golf ball having an inner cover (15) with a Shore D hardness  $\leq$  53 and an outer cover (16) with a Shore D hardness 40-60, the outer cover being harder than the inner cover (col. 3, lines 30-49). Yamagishi's golf ball has an inner sphere (12) with a Shore D hardness 20-55 and a surrounding layer 13 (surrounding the inner sphere) with a Shore D hardness  $\geq$  45, the surrounding layer preferably being harder than the inner sphere and the inner cover (col. 4, lines 20-31).

The appellant argues that Melvin's center core can be either softer or harder than the outer core, as long as the specific gravity of the center core differs from that of the outer core by at least 0.1 (brief, page 9). Melvin's golf ball can have an inner cover Shore D hardness 65 or greater and an outer cover layer Shore D hardness 65 or less, the inner cover being harder than the outer cover, as required by each of the appellant's independent claims (1, 14 and 20). Also, the center component of Melvin's multilayer core can be softer relative to the core layer (appellant's claims 1 and 14), and the core layer can have a Shore D hardness ≥ 60 (appellant's claim 20).

<sup>&</sup>lt;sup>2</sup> Melvin actually requires a specific gravity difference of more than 0.1 (abstract; col. 9, lines 5-6).

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Thus, Melvin would have fairly suggested, to one of ordinary skill in the art, the multi-layer core recited in the appellant's independent claims 1, 14 and 20.

The appellant argues that there would have been no motivation to substitute Yamagishi's core for that of Melvin because Melvin discloses that the core has specific properties designed to control the moment of inertia, and Yamagishi's outer cover is harder than the inner cover whereas Melvin's inner cover is harder than the outer cover (brief, page 9). Melvin indicates that the desired moment of inertia, coefficient of restitution, compression and hardness are obtainable whether the center core is harder or softer than the outer core (col. 4, lines 58-67; figure). It reasonably appears that Yamagishi's disclosure that the hardness of the layer surrounding the inner sphere is greater than that of the inner sphere to compensate for the short restitution of the soft inner sphere (col. 4, lines 29-32) would have fairly suggested, to one of ordinary skill in art, using the portions of Melvin's core hardness ranges wherein the outer core hardness is greater than the center core hardness to obtain that benefit.

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For the above reasons we are not convinced of reversible error in the examiner's rejection of claims 1-3, 5-9, 11-16, 19 and 20.

# Rejection of claims 4 and 17

Claim 4, which depends from claim 1, and claim 17, which depends from claim 14, require that the core layer comprises more than one layer.

The appellants quote the examiner's argument regarding the disclosure on Farrally's page 411 (brief, page 11), and then argue that "Farrally et al. (on page 411) discloses that double cores, not a core with two or more layers, are advantageous" (brief, page 12).

The copy of Farrally in the office electronic file does not have a page 411; it has only pages 441-442. A faxed copy of Farrally received from the appellant's counsel on February 6, 2007 also has only pages 441-442. We do not find on those pages a disclosure regarding any advantage of a double core. Furthermore, Melvin uses the terms "core having a two layer structure" and "double core" interchangeably (col. 9, lines 29-37). Thus, we are not convinced by the appellant's argued distinction between a double core which, the appellant concedes Farrally discloses (brief, page 12), and a core with two or more layers.

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We therefore are not convinced of reversible error in the examiner's rejection of claims 4 and 17.

## **DECISION**

The rejections under 35 U.S.C. § 103 of claims 1-3, 5-9, 11-16, 19 and 20 over Melvin in view of Yamagishi, and claims 4 and 17 over Melvin in view of Yamagishi and Farrally, are affirmed.

## **AFFIRMED**

Terry Y. Owens TERRY J. OWENS Administrative Patent Judge	20 13 EART 8
MURRIEL E. CRAWFORD Administrative Patent Judge	) ) ) ) BOARD OF PATENT ) APPEALS ) AND ) INTERFERENCES
STUART S. LEVY Administrative Patent Judge	) ) ) )

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